United States Department of Agriculture | Forest Service | Northeastern Area State and Private Forestry | Cor. Concord & Mast Rds. P. O. Box 640 Durham. NH 03824

Reply To: 3410

Date: August 15, 1994

David Crary
USDI, National Park Service
Cape Cod National Seashore
Resource Management
South Wellfleet, MA 02663

Dear Mr. Crary:

Kurt Allen, Mark Adams, and I conducted an aerial survey of the Cape Cod National Seashore on July 19, 1994. We found 280 acres of light defoliation on beach plum by browntail moth, eastern tent caterpillar and fall webworm (see enclosed maps). There were also 147 acres of light defoliation by gypsy moth near Round and Gull Ponds (see enclosed map). Other damage found was 1034 acres of pine tip moth (594 heavy and 440 moderate) damage inside the park boundary, and 7034 acres (3027 light, 2594 moderate, 1210 heavy, and 203 mixed defoliation near the park on the seashore (see enclosed maps).

Locations of browntail, forest tent caterpillar, and fall webworm damage on or near boundary on Cape Cod National Seashore.

Location	Damage (estimated acres) (all light)
Long Point (5 areas)	22
Herring Cove Beach	3
Airport (Race Point)	42
Province Center to Race Point	10
Pilgrim Lake	34
The Highlands	9
North Truro Airforce Station	111
Great Beach Hill	14

Total defoliation browntail moth on National Park 245

Total defoliation browntail moth off National Park 35

Total defoliation browntail moth all categories 280

Locations of gypsy moth defoliation on Cape Cod National Seashore

Location	Damage (estimated acres) (all light)
Round Pond (North East)	70
Gull Pond (East)	46
Kinnacum and Spectacle Ponds	31

Locations of pine tip moth damage on Cape Cod (near National Seashore)

Location	Damage (estimated acres) Light	Moderate	Heavy	Scattered (mixed)
Highland South Hollow	0	33	0	0
Village Pond (South)	0	75	0	0
Great Hollow - Longnook	0	0	0	203
Route 6 Castle Road	0	90	0	0
Longnook Road	0	61	0	0
Higgins Hollow Road	0	34	0	0
North Pamet Road	0	154	0	0
Castle Road	0	360	0	0
Pilgrim Spring Road	0	0	333	0
Paine Hollow Road	0	108	137	0
Kingsbury Beach Road (North)	1000	0	0	0
Old orchard Road	0	295	0	0
Minister Pond East	0	75	296	0
Great Pond NW	0	140	381	0
Herring Brook Road	0	126	0	0
Bridge Road		84	0	0
Hay Road	321	0	0	0
Tonset Road	279	0	0	0
Tonset	0	63	0	0
Orleans Beach		91	32	0
Little Pleasant Bay MW	1427	31	31	0
South Orleans SE	0	403	0	0
Shoal Twinnings Ponds	0	154	0	0
Nickersons Neck	0	78	0	0
Great Hill (south east)	0	139	0	0
Total pine damage off National Park	3027	2594	1210	203

Grand total all categories off National Park 7034

Locations of pine tip moth damage on Cape Cod National Park

Location	Damage (estimated acres) Light	Moderate	Heavy
Highland to South Hollow	0	22	0
Longnook Road	0	26	0
Higgins Hollow Road	0	15	0
Island Road	0	34	0
Nauset Light Beach (west)	0	343	0
Ocean View Road	0	0	413
Nauset Bay (north west)	0	0	181
Total pine damage on National Park	0	440	594

Grand total all categories on National Park 1034

Grand total all pine damage 8068

Kurt Allen and I inspected the damage on the Cape, and we expect the browntail and gypsy moth to remain at low levels in 1995. Pine tip moth damage is expected to remain at moderate to high levels in 1995. Bark beetles and pine mortality was found in areas where the tip moth damage was heavy. We expect the pine tip moth damage to remain moderate to heavy in 1995, and we expect the bark beetle populations to increase.

If you have any questions or concerns about the aerial survey and ground check, please contact George Saufley at (603) 868-7715/7709.

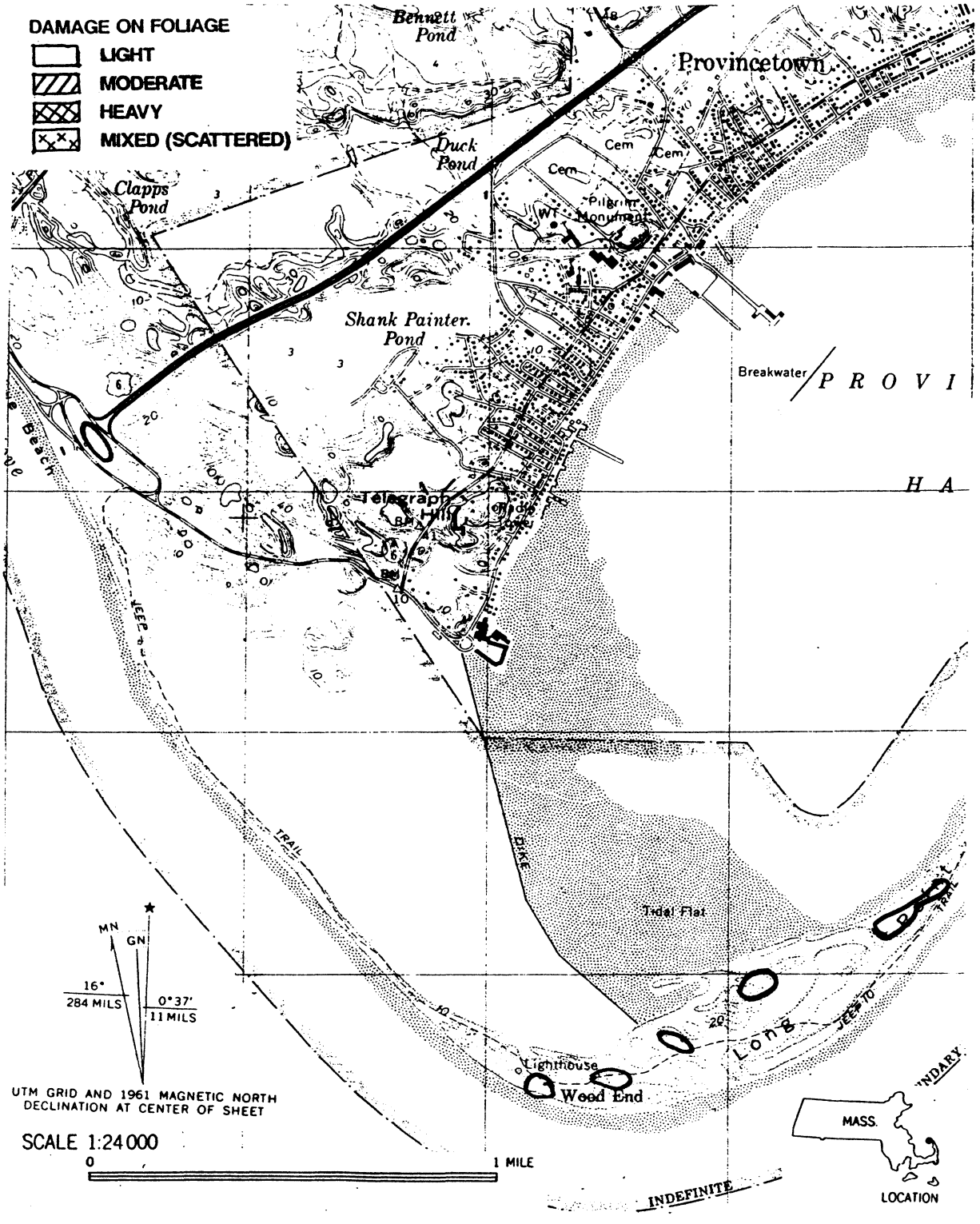
Sincerely,

George C. Saufley

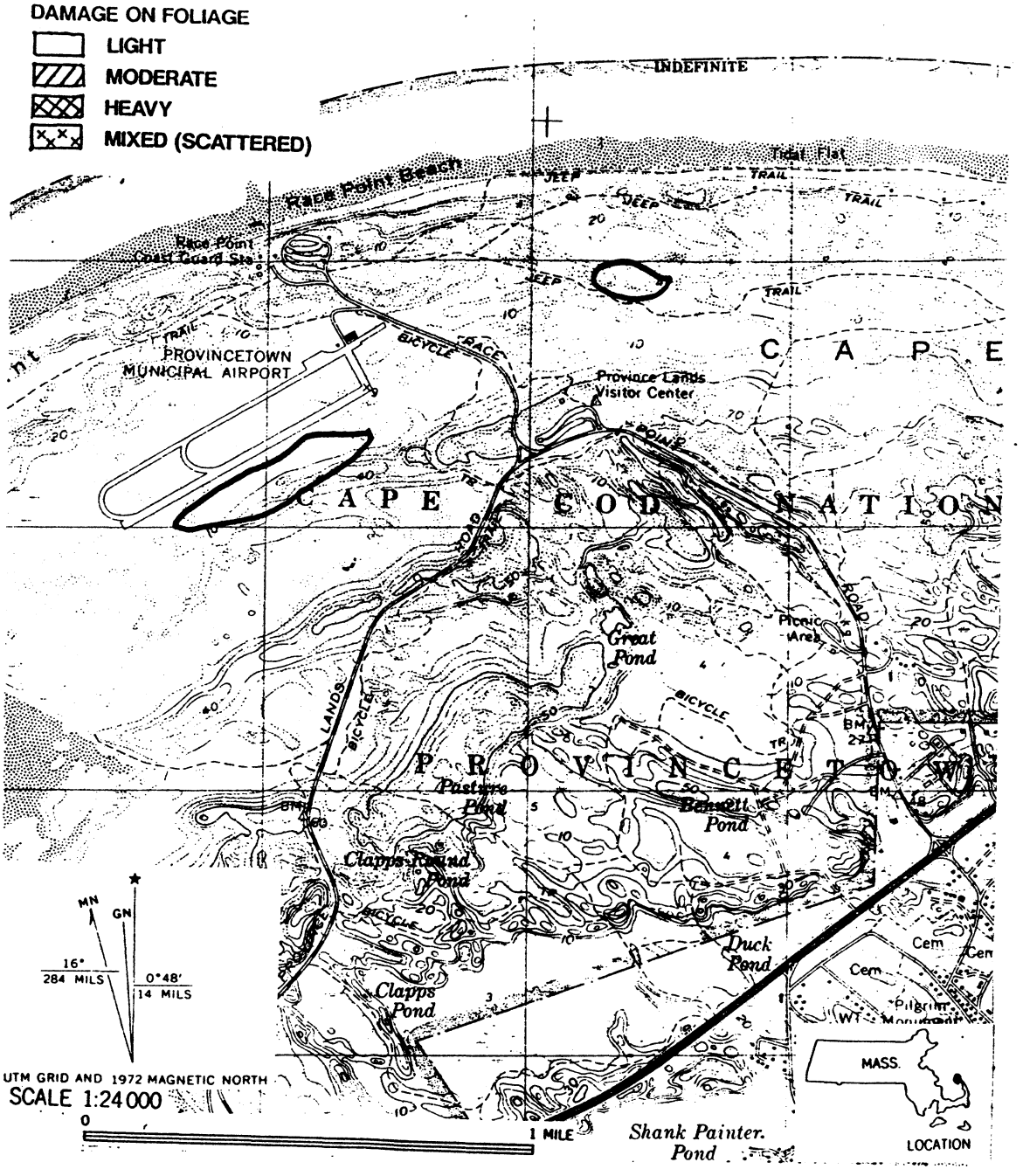
GEORGE C. SAUFLEY
Forestry Technician
Forest Health Protection

Enclosures

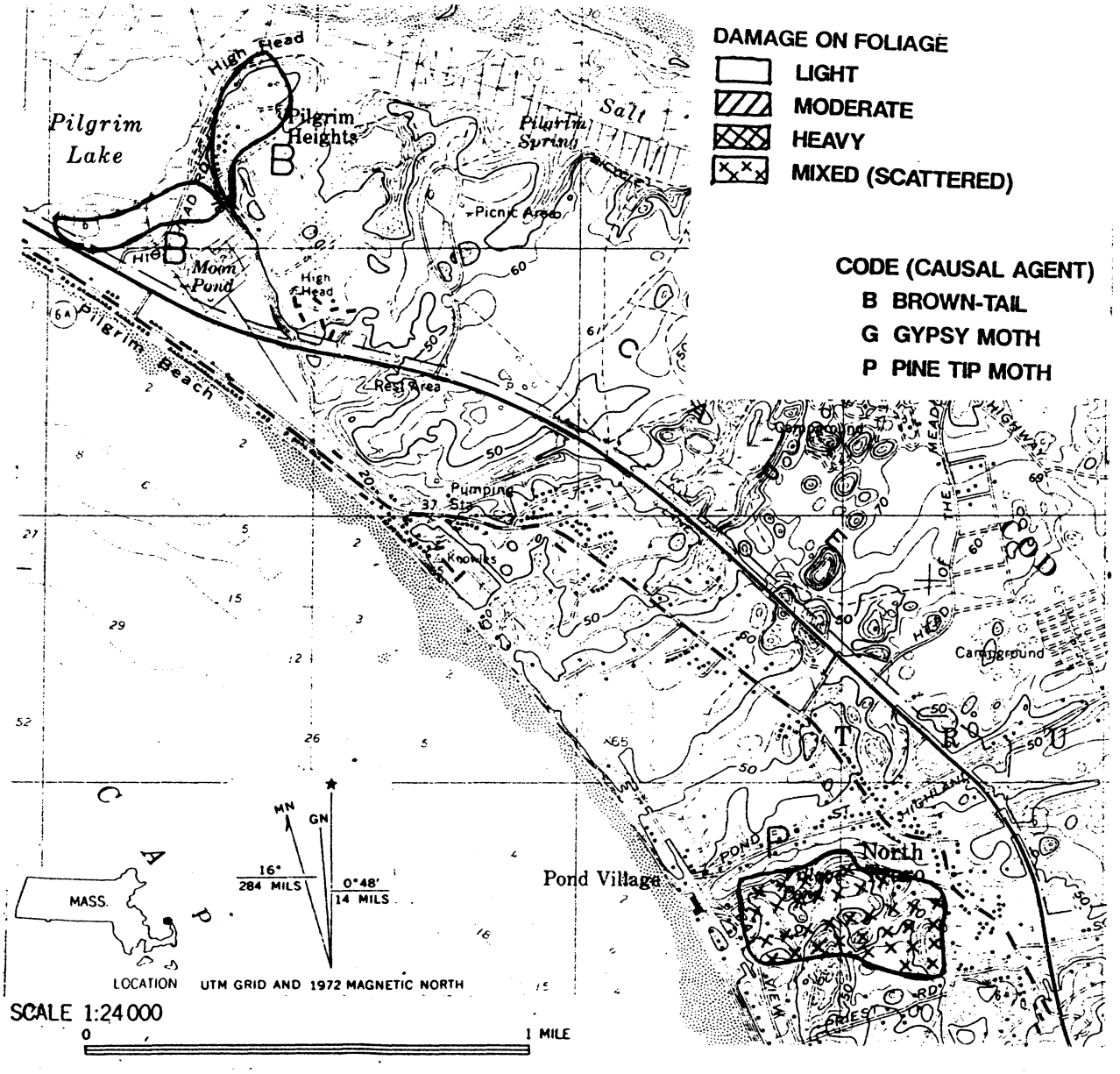
cc:
C. Burnham



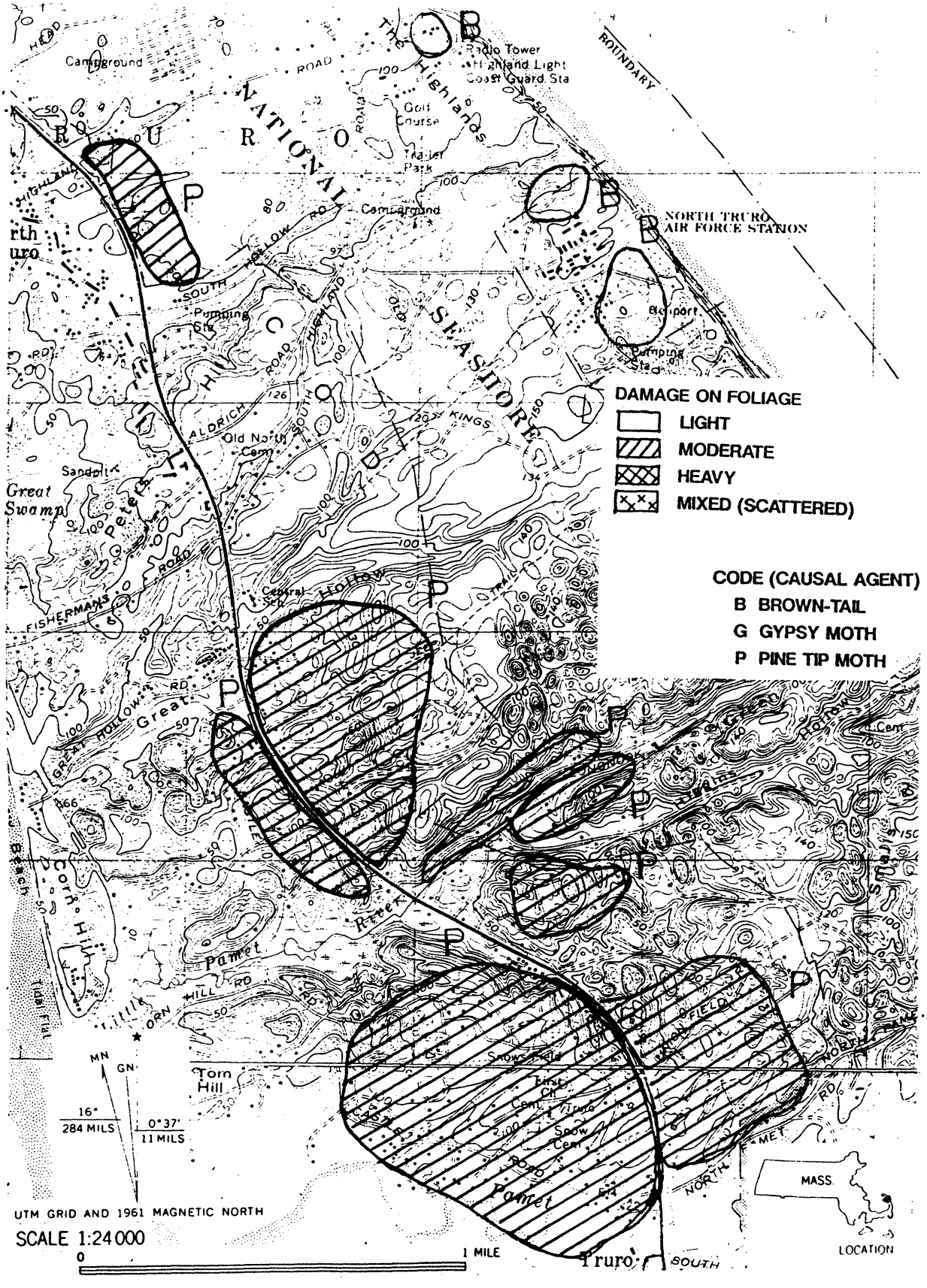
Map 1. Areas of brown-tail moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994



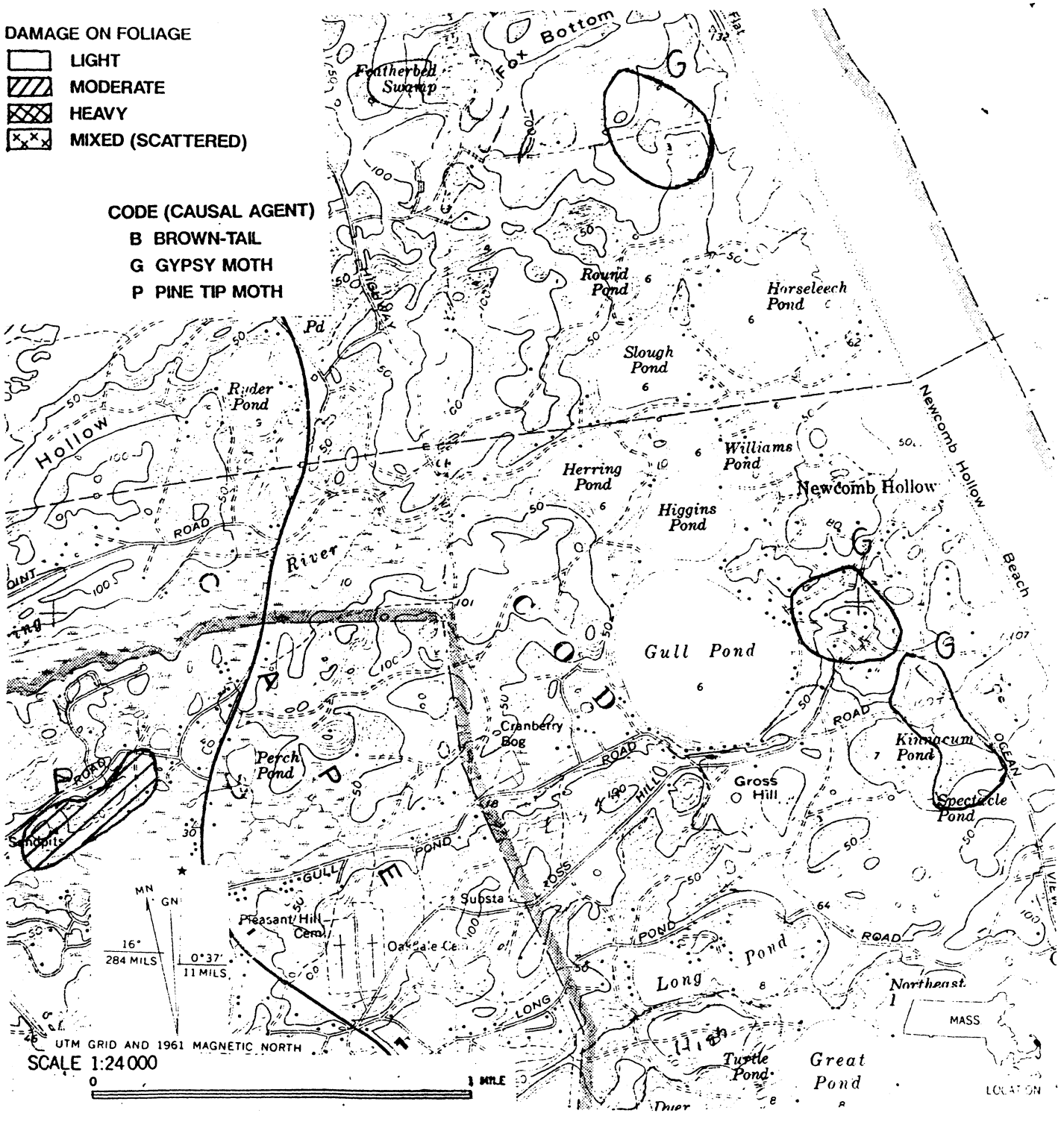
Map 2. Areas of brown-tail moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994.



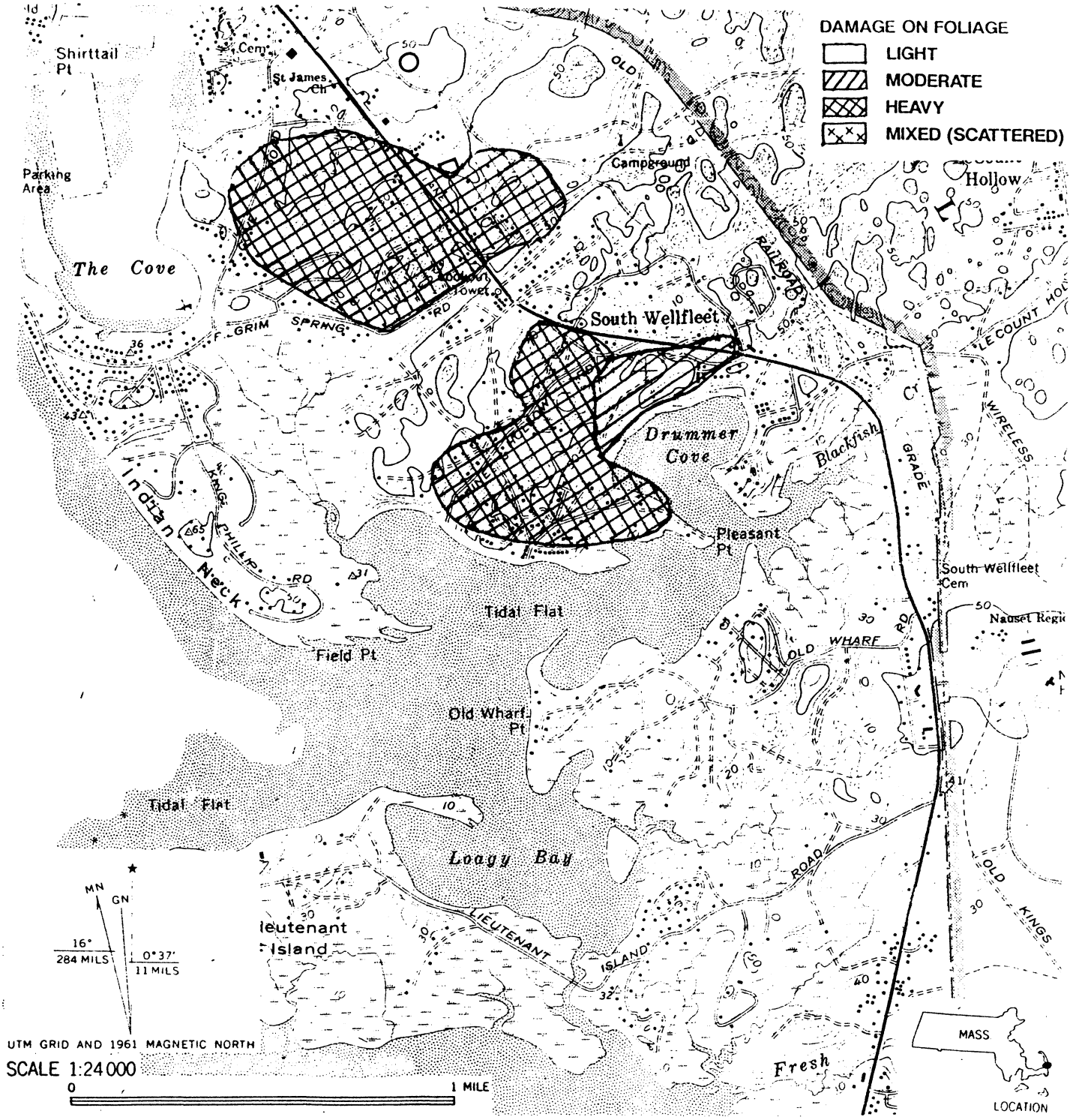
Map 3. Areas of brown-tail moth and pine tip moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994.



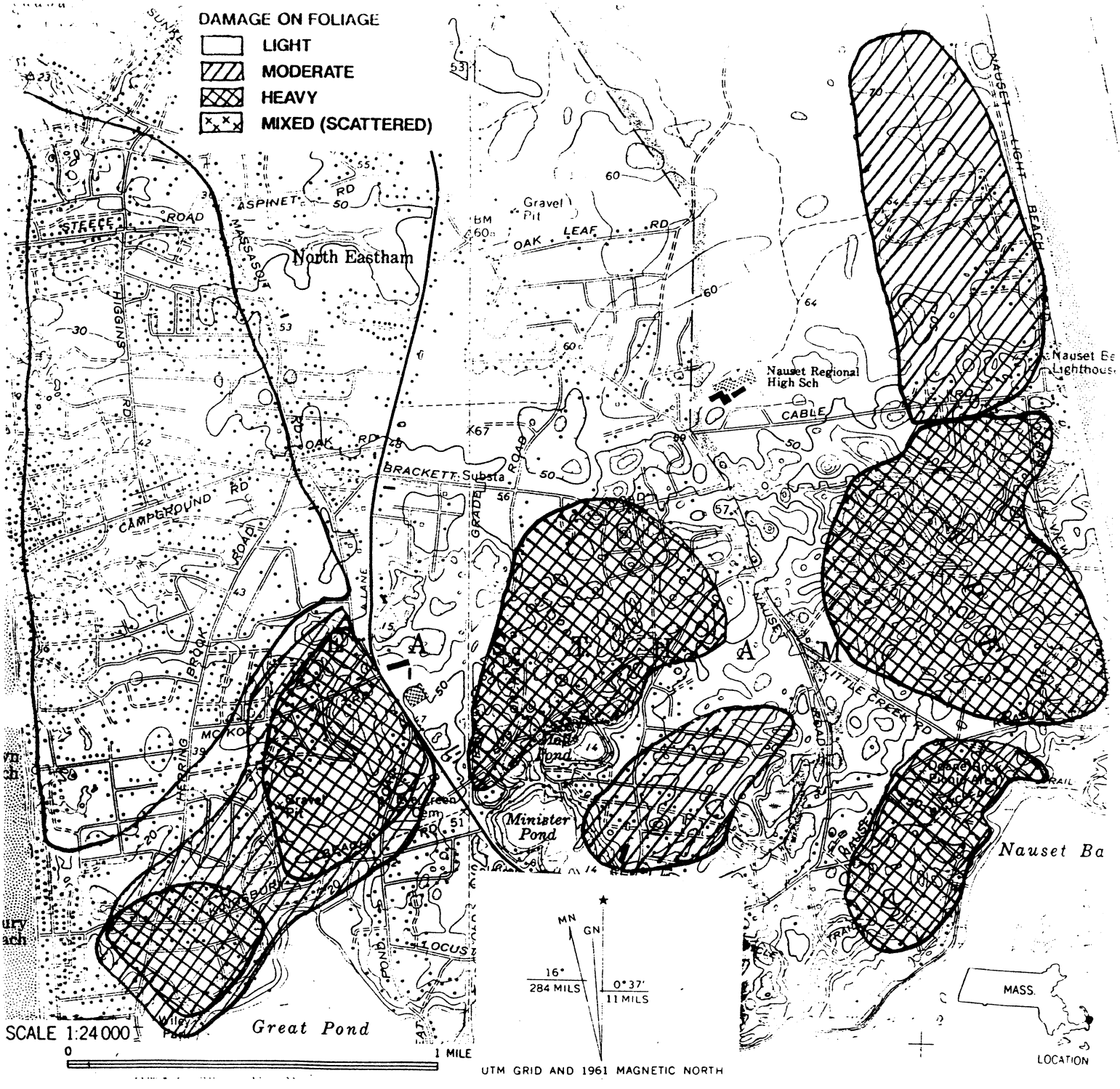
Map 4. Areas of brown-tail moth and pine tip moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994.



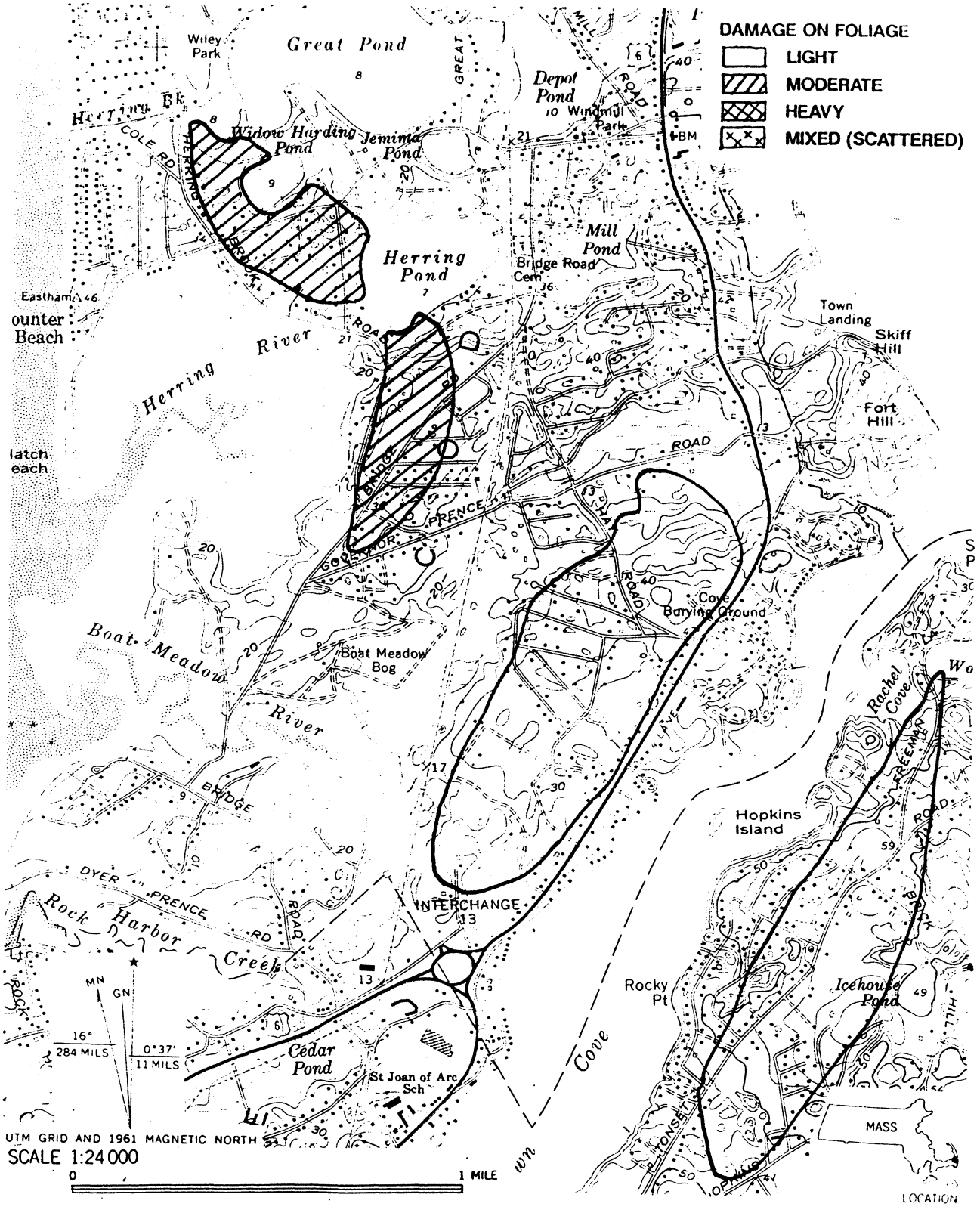
Map 5. Areas of gypsy moth and pine tip moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994.



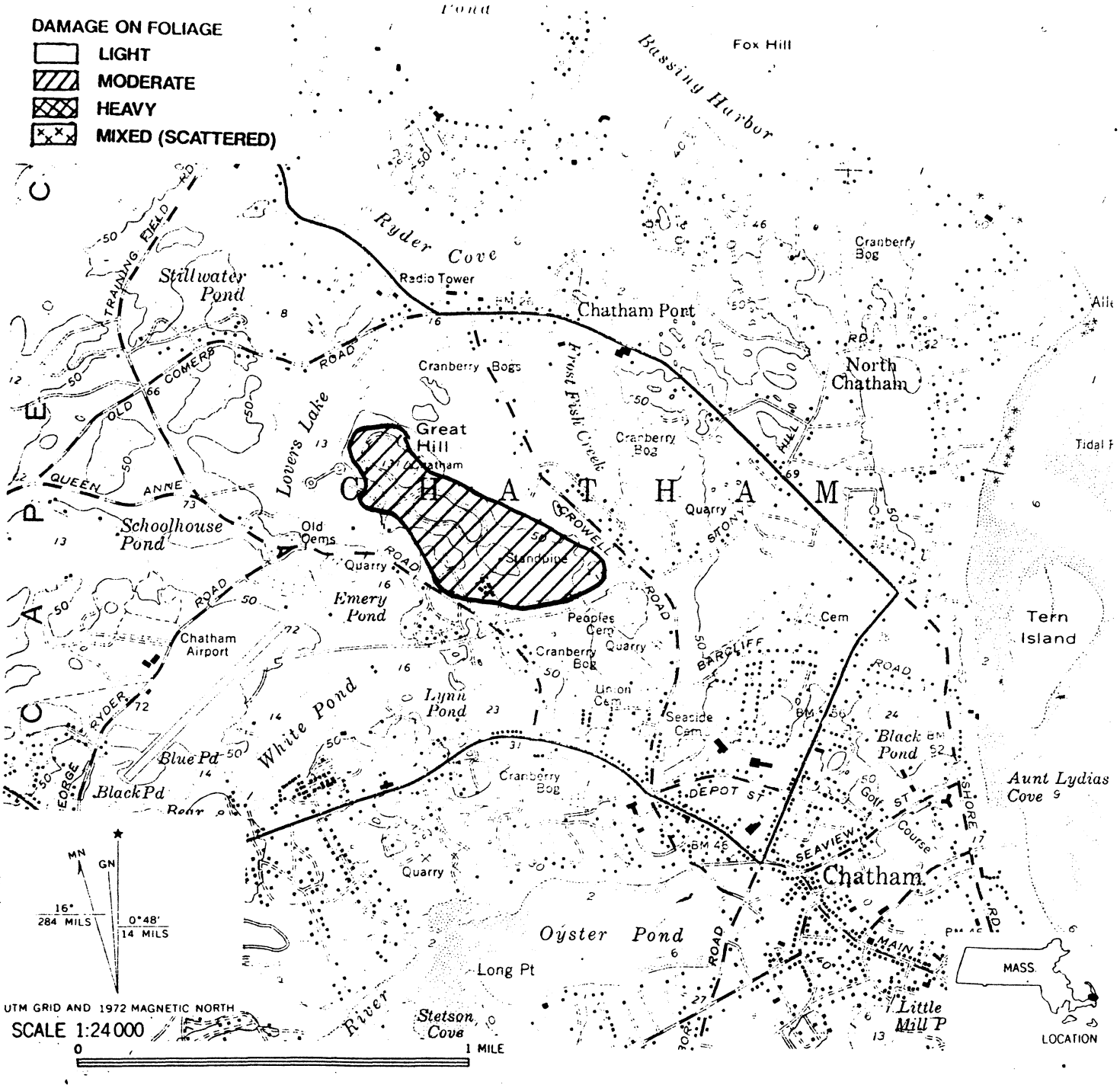
Map 6. Areas of pine tip moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994.



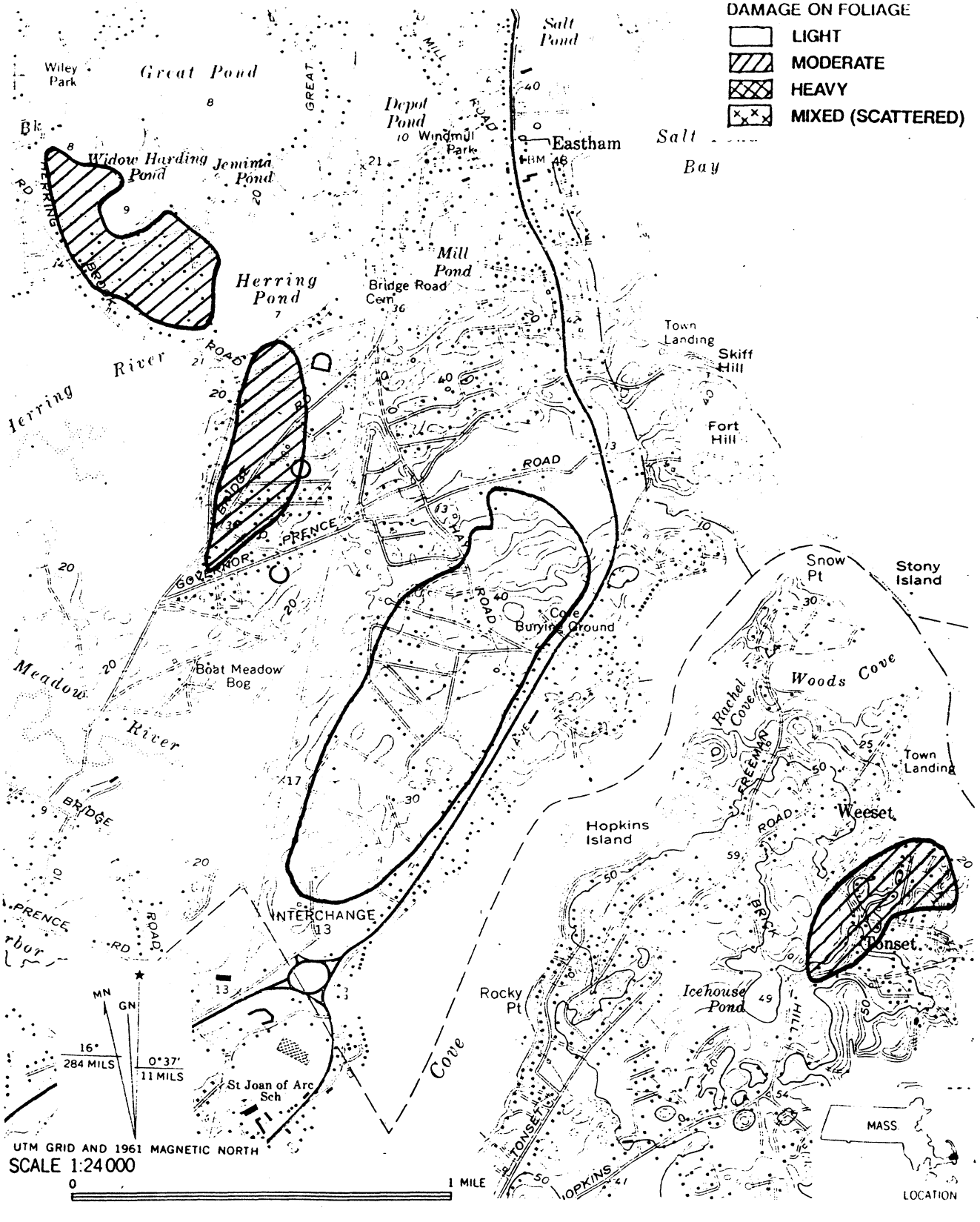
Map 7. Areas of pine tip moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994.



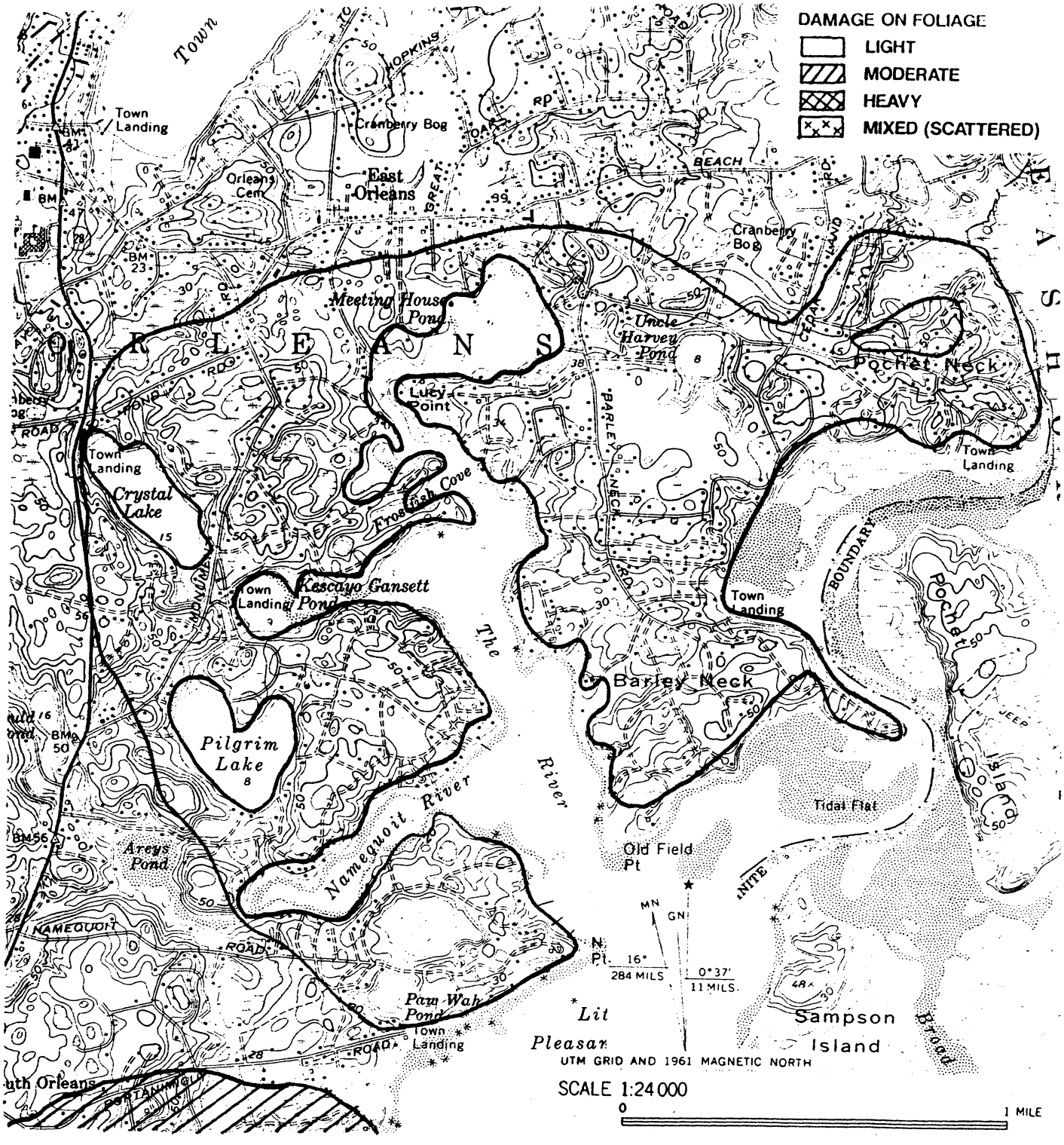
Map 8. Areas of pine tip moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994.



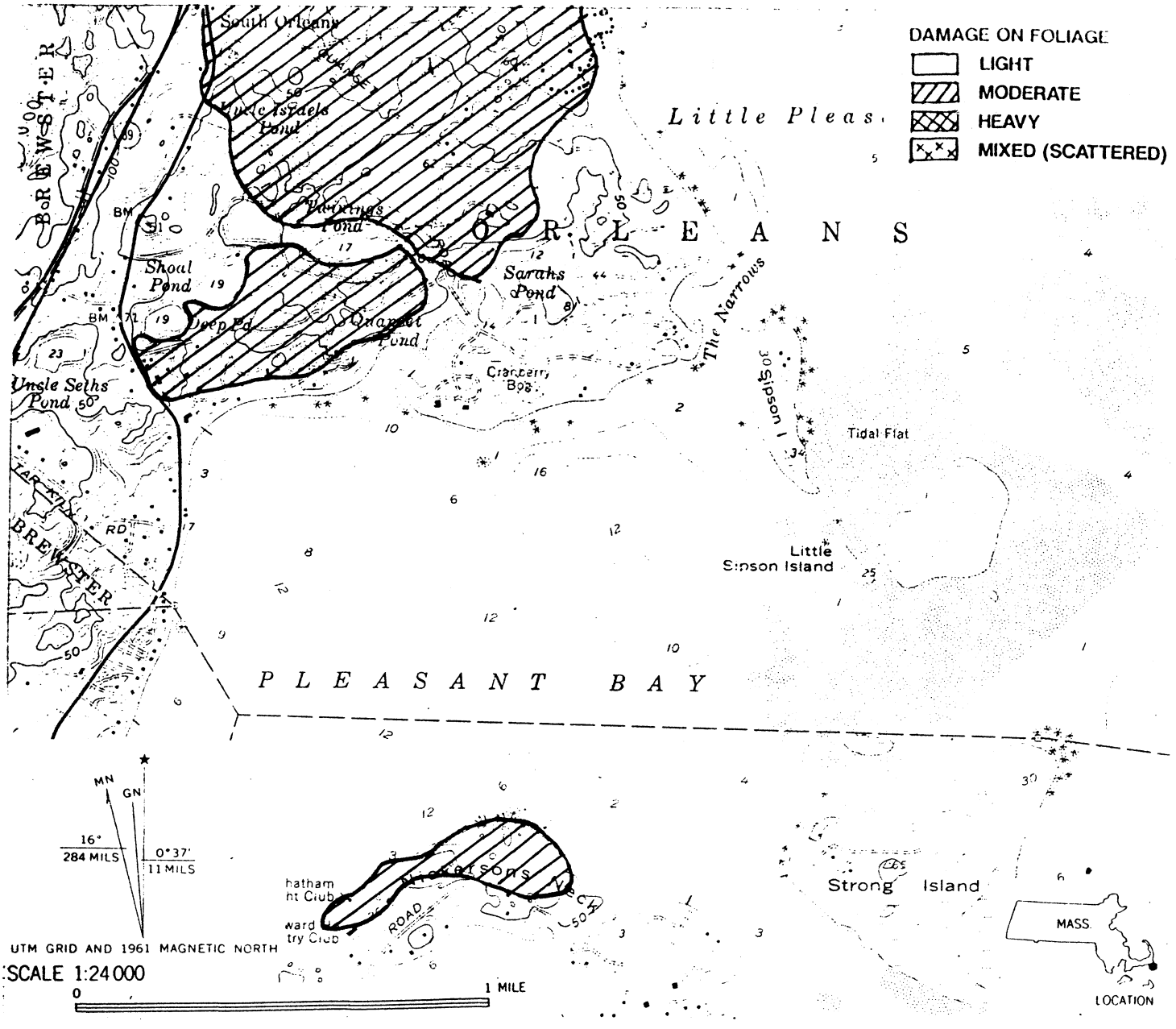
Map 9. Areas of pine tip moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994.



Map 10. Areas of pine tip moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994.



Map 11. Areas of pine tip moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994.



Map 12. Areas of pine tip moth on Cape Cod National Seashore. The map was created from the results of an aerial survey conducted on July 19, 1994.